

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 03/107033 A1

- (51) International Patent Classification⁷: **G01S 13/00**, 13/87
- (21) International Application Number: PCT/SE03/00988
- (22) International Filing Date: 13 June 2003 (13.06.2003)
- (25) Filing Language: Swedish
- (26) Publication Language: English
- (30) Priority Data:
0201818-2 14 June 2002 (14.06.2002) SE
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD FOR DETERMINING POSITIONS OF TARGETS BY BISTATIC MEASUREMENTS USING SIGNALS SCATTERED BY THE TARGETS

(57) Abstract: The present invention relates to a method for determining the positions of targets by bistatic measurements using signals scattered by the targets. Also the velocities of the targets can be determined. The range of the transmitters is selected so that a target at an arbitrary point can be measured by scattering in the target by at least four cooperating measuring facilities. First the targets are associated. This occurs by calculating, in two independent ways, two sets of sums of distances between transmission points and targets and, respectively, targets and reception points. Subsequently, said two sums are sorted with respect to distance, compared with each other, and the sums that correspond with each other, while considering a margin of error that has been determined in advance, are stated to correspond to conceivable targets. The association of targets is improved and completed by corresponding calculations being carried out for Doppler velocities. Finally, the positions of the targets are calculated from a system of equations for the bistatically measured distances.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G01S 13/00, G01S 13/87

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4499468 A (D.MONTANA ET AL), 12 February 1985 (12.02.85), column 4, line 15 - column 6, line 15, figures 2,7,8 -----	1-10

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Date of the actual completion of the international search

25 August 2003

Date of mailing of the international search report

27-08-2003

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Information on present family members

PCT/SE 03/00988

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Form PCT/ISA/210 (patent family annex) (July 1998)